# Efficacy of co-trimoxazole in Donovanosis

## A preliminary report

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SUMMARY Co-trimoxazole (Septrin, Wellcome) was prescribed in a dose of two tablets twice daily for the treatment of 10 patients with Donovanosis. All the patients responded well to this treatment, and the ulcers healed completely within 10 days in eight patients and within 14 days in the remaining two. Ten days' treatment with 40 tablets of co-trimoxazole is suggested as sufficient to treat Donovanosis. No adverse reactions were noted in any patient.

### Introduction

Streptomycin is still the drug of choice in our clinic for Donovanosis (granuloma inguinale). Only those patients who develop adverse reactions or do not respond to streptomycin are given tetracyclines. The failure of both these drugs in one of our patients forced us to try an alternative drug. We chose co-trimoxazole (Septrin, Wellcome) as it does not mask concomitant syphilis (Svindland, 1973). A preliminary report of our experience with 10 patients is presented in this paper.

## Material and method

We studied 10 patients (five men and five women) with Donovanosis who were admitted to the sexually transmitted diseases and dermatology ward at Jipmer Hospital, Pondicherry, between December 1977 and February 1978. The diagnosis was established by demonstrating Donovan bodies in the tissue smears from the ulcers. The ulcers had been present for less than six months in four patients, for between one and two years in five patients, and for five years in one patient. All the patients were given two tablets of co-trimoxazole by mouth twice daily (each tablet containing 80 mg of trimethoprim and 400 mg of sulphamethoxazole). Further tissue smears from the ulcers were examined on the third, fifth, seventh, and ninth days of treatment. Besides the clinical assessment, patients

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were also watched for any adverse drug effects. Treatment was continued until the ulcers were completely healed.

#### Results

All the patients responded well to this drug. The tissue smears for Donovan bodies showed negative results in four patients on the fifth day and in all patients by the seventh day. The ulcers healed within about eight days in two patients, within 10 days in six patients, and within 14 days in the remaining two patients. No adverse drug effects were noted in any patient.

## Discussion

Co-trimoxazole is a bactericidal drug in a concentration at which the two components alone are bacteriostatic, and it is often active against organisms which are resistant to one of the components. It is effective against a wide range of Gram-positive and Gram-negative organisms (Schiffman, 1975). It has been tried in patients with gonorrhoea (Kristensen and From, 1975; Sowmini et al., 1976; Reddy et al., 1977) and in patients with lymphogranuloma venereum (Chanderasekaran, 1976) and found effective. We have been unable to find another report in the English-language literature about its use in treating Donovanosis.

Complete healing of the ulcers in all our patients is definite proof of its effectiveness in Donovanosis. However, the number of patients studied here is too small to compare its relative efficacy with that of streptomycin or the tetracyclines, so a study of more patients with a two-year follow up is at

present in progress. Since the tissue smears showed negative results for Donovan bodies in all patients on the seventh day, and the ulcers healed completely in eight patients within ten days, we suggest that 10-days' treatment with co-trimoxazole (40 tablets) would be enough to treat most cases of Donovanosis.

The drug is usually well tolerated at the recommended dosage. However, some patients may complain of nausea, vomiting, or skin rashes. Thrombocytopenia, leucopenia, neutropenic purpura, and agranulocytosis are very rare. No adverse side effects were found in our patients.

#### References

Chanderasekaran, N. K. (1976). Efficiency of trimethoprim-sulphamethoxazole combination in the treatment of lymphogranuloma venereum. Proceedings of the first conference of the Indian Association for the Study of sexually transmitted diseases. Bulletin of South East Asian Western Pacific Region Branch of International Union against Venereal Diseases and the Treponematoses, 1, 21-22.

- Kristensen, J. K., and From, E. (1975). Trimethoprim-sulphamethoxazole in gonorrhoea. A comparison with pivampicillin combined with probenecid. British Journal of Venereal Diseasees, 51, 31-33
- Reddy, B. S. N., et al. (1977). All-purpose penicillin (Penidure AP), doxycycline (Minibiotic), trimethoprim-sulphamethoxazole (Septrin) and oxytetracycline (Terramycin) in acute gonococcal urethritis. Indian Journal of Dermatology, Venereology and Leprosy, 43, 251-255.
- Schiffman, D. O. (1975). Evaluation of an anti-infective combination of trimethoprim-sulphamethoxazole (Bactrim, Septrin). *Journal of the American Medical Association*, 231, 635-637.
- Sowmini, C. N., et al. (1976). Septrin in the treatment of gonorrhoea. Indian Journal of Dermatology, Venereology and Leprosy, 42, 110-112.
- Svindland, H. B. (1973). Treatment of gonorrhoea with sulphamethoxazole-trimethoprim. Lack of effect on concomitant syphilis. British Journal of Venereal Diseases, 49, 50-53.